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### REMARKS

Applicants appreciate the thorough review of the present application as reflected in the Official Action mailed January 25, 2005. Applicants appreciate the withdrawal of the anticipation rejection and objections to the specification. Applicants have amended the independent claims to expedite allowance of the present application by incorporating recitations of many of the dependent claims. The corresponding dependent claims have been cancelled. Such amendments are made to expedite prosecution of the present application and without prejudice to filing a continuation application on the originally filed claims.

#### The IDSs

Applicants appreciate the return of the initialed copies of the previously submitted PTO-1449 forms. Applicants also submit herewith an IDS of additional materials for consideration by the Examiner. Applicants request that the Examiner return an initialed copy of the PTO-1449 form submitted with the accompanying IDS.

#### The Claims Are Not Obvious

Claims 1-40 stand rejected under 35 U.S.C. § 103 as obvious in light of United States Patent No. 5, 603,029 to Aman *et al.* (hereinafter "Aman") and United States Patent No. 6,594,268 to Aukia *et al.* (hereinafter "Aukia"). Official Action, p. 2. Because Applicants have amended the independent claims, Applicants will focus the present response on the rejection of dependent Claims 6 and 7 with respect to Claim 1 and the corresponding dependent claims with respect to Independent Claims 13, 21 and 31. Applicants submit that Claims 13, 21 and 31 as amended are patentable for reasons analogous to those discussed herein with reference to Claims 6 and 7.

Turning to the specifics of the rejections of Claims 6 and 7, Claim 1 has been amended to incorporate the recitations of Claim 6, including:

determining a value for F-loss by mapping a TCP loss ratio to the value for F-loss;  
determining a value for F-timeout by mapping a timeout loss ratio to the value for F-timeout;

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determining a value for F-con by determining if a number of current connections exceed a predefined percentage of a total number of allowed connections and setting F-con to 1 if the total number of connections exceeds the predefined percentage of the total number of allowed connections and to 0 if the total number of connections does not exceed the predefined percentage of the total number of allowed connections;

Amended Claim 1. In rejecting Claim 6, the Official Action cites to col. 6, lines 59-66, col. 10, lines 53-52[sic], col. 16, lines 62-67, col. 17, lines 1-10 and col. 24, lines 24-40 of Aukia as disclosing the recitations of Claim 6. Official Action, p. 7. Applicants assume that the reference to col. 10 of Aukia is to lines 52-62. If such assumption is incorrect, Applicants request clarification from the Examiner.

Applicants note that the recitations of Claim 6 as incorporated into Claim 1 do not merely recite the use of TCP loss, timeout loss or percentage of connections, but recite mapping these values to values for determining a workload metric. Thus, for example, Applicants submit that col. 6, lines 59-66 of Aukia describing QoS based on bandwidth, delay and loss does not disclose or suggest the mappings recited in amended Claim 1.

With regard to the remaining cited portions of Aukia, col. 10, lines 53-62 of Aukia merely describes queue selection based on a weighted round robin approach. Col. 16, lines 62-67 of Aukia describes comparing end-to-end delays to a predetermined delay threshold. The above quoted portions of amended Claim 1 say nothing about using end-to-end delay. Col. 17, lines 1-10 of Aukia describes per-hop delays. The above quoted portions of amended Claim 1 say nothing about using per hop delays. Finally, col. 24, lines 24-40 of Aukia describes parameters that reflect the effective loss of revenue occasioned when the carrying of connections of a given service class s on a given link l reduces the remaining capacity. The above quoted portions of amended Claim 1 say nothing about loss of revenue. Accordingly, Applicants submit that the portions of Aukia cited in rejecting Claim 6 do not disclose or suggest "determining a value for F-loss by mapping a TCP loss ratio to the value for F-loss," "determining a value for F-timeout by mapping a timeout loss ratio to the value for F-timeout," or "determining a value for F-con by determining if a number of current connections exceed a predefined percentage of a total number of allowed connections and setting F-con to 1 if the total number of connections exceeds the predefined percentage of the total number of allowed connections and to 0 if the total number

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of connections does not exceed the predefined percentage of the total number of allowed connections" as recited in amended Claim 1.

Claim 1 has also been amended to incorporate certain of the recitations of original Claim 7. These incorporated recitations include:

wherein generating workload metrics comprises evaluating the equation:

$$Aw = (1 - \text{MIN}(1, F\text{-loss} + F\text{-timeout} + F\text{-con})) * W$$

where Aw is the workload metric.

Amended Claim 1. In rejecting Claim 7, the Official Action cites to col. 16, lines 62-67, col. 17, lines 1-10 and col. 24, lines 24-40 of Aukia as disclosing the recitations of Claim 7 that have been incorporated into Claim 1. Official Action, p. 8. Applicants submit that these cited portions of Aukia do not disclose or suggest the equation recited in amended Claim 1.

In particular, col. 16, lines 62-67 Aukia describes a QoS routing module that compares end-to-end delays to a predetermined delay threshold. None of the variables in the equation reproduced above are delay values, they are loss values or binary value based on a comparison of the number of connections to the total number of allowed connections and the weight (W) is based on a data processing systems processing capability. Thus, this portion of Aukia does not describe any portion of the above-cited equation.

Col. 17, lines 1-10 of Aukia describes the per-hop delay calculation. As discussed above, the equation incorporated into Claim 1 is not based on delay. Thus, this portion of Aukia does not describe any portion of the above-cited equation.

Finally, col. 24, lines 24-40 of Aukia are also cited as disclosing the above-cited equation. As discussed above, this portion of Aukia describes parameters that reflect the effective loss of revenue occasioned when the carrying of connections of a given service class s on a given link l reduces the remaining capacity. Furthermore, the equation cited at line 40 of col. 24 of Aukia appears to bear no relation to the equation incorporated into Claim 1.

Given the differences between the cited portions of Aukia and the recitations of Claim 1 discussed above, Applicants submit that the cited portions of Aukia do not disclose or suggest each of the recitations of amended Claim 1. Accordingly, Applicants submit that Claim 1 and the claims that depend from Claim 1 are patentable over the cited portions of Aukia and Aman. Applicants also submit that amended independent Claims 13, 21 and 31 and the claims that

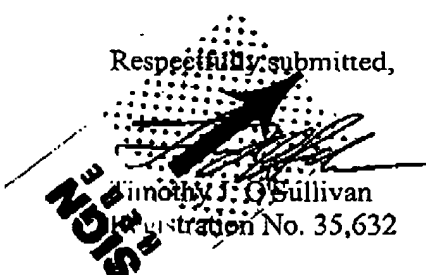
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depend from these claims, are patentable over the cited portions of Aukia and Aman for analogous reasons.

**Conclusion**

In light of the above discussion, Applicants submit that the present application is in condition for allowance, which action is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call Applicants' representative at (919) 854-1400.

Respectfully submitted,

  
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